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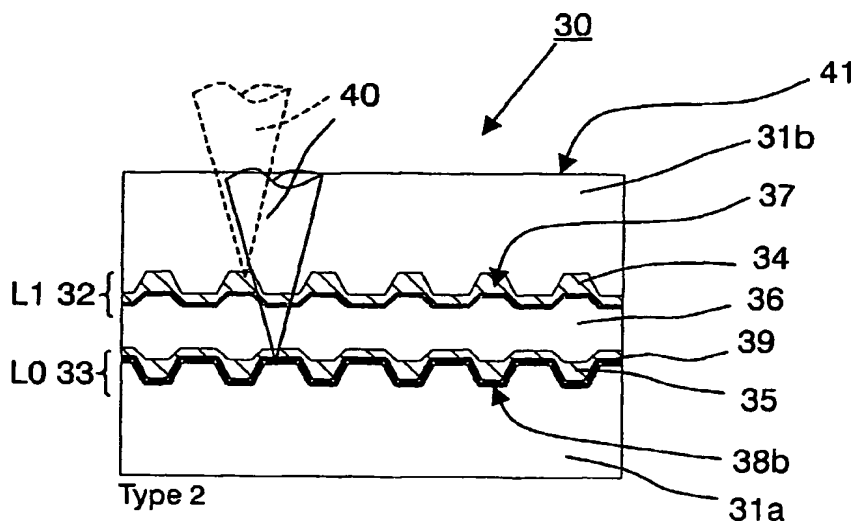
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(54) Title: OPTICAL DATA STORAGE MEDIUM AND USE OF SUCH MEDIUM



(57) Abstract: A multi-stack optical data storage medium (30) for recording and reading using a focused radiation beam (40) entering through an entrance face (41) of the medium (30) is described. It has a first substrate (31a) with present on a side thereof a first recording stack (33) named  $L_0$ , comprising a recordable type  $L_0$  recording layer (35), formed in a first  $L_0$  guide groove (38a, 38b). A first reflective layer (39) is present between the first  $L_0$  recording layer (35) and the first substrate (31a). A second substrate (31b) with present on a side thereof a second recording stack (32) named  $L_1$  is present at a position closer to the entrance face (41) than the  $L_0$  recording stack (33) and formed in a second  $L_1$  guide groove (37). A transparent spacer layer (36) is sandwiched between the recording stacks (32, 33). The first  $L_0$  guide groove (38a, 38b) has a depth  $G_{L0} < 100$  nm. In this way a relatively high reflection value of the  $L_0$  stack is achieved at a radiation beam wavelength of approximately 655 nm.

**Declaration under Rule 4.17:**

- *as to the identity of the inventor (Rule 4.17(i)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ,*

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